

What is claimed is:

1. A method for false sync code protection (FSP) decoding of a video data signal (25) encoded with padding binary numbers, comprising the steps of:

5 examining (32) the video data signal (25) in a byte-by-byte manner to identify a predetermined binary number,

determining (46) if the padding binary number follows the predetermined binary number based on a predetermined criterion, and

removing (48) the padding binary number next to the predetermined binary number, if the predetermined criterion is met.

10 2. The method of claim 1, wherein the padding binary number is an 8-bit binary number, which is equivalent to one byte.

3. The method of claim 1, if the predetermined criterion is met, further comprising the step of:

15 examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the removed padding binary number to identify a further predetermined binary number.

4. The method of claim 1, if the predetermined criterion is not met, further comprising the step of:

20 examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the predetermined binary number to identify a further predetermined binary number.

5. A method for false sync code protection (FSP) decoding of a video data signal (25) encoded with padding bytes, comprising the steps of:

examining (32) the video data signal (25) in a byte-by-byte manner to identify a zero byte,

determining (46) if the padding byte follows the zero byte based on a predetermined criterion, and

5 removing (48) the padding byte next to the zero byte, if the predetermined criterion is met.

6. The method of claim 5, wherein the padding byte is a binary number 10100101 or equivalently a hexadecimal number A5.

7. The method of claim 5, if the predetermined criterion are met, further
10 comprising the steps of:

skipping (50) one byte after the removed padding byte, and

examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the skipped byte to identify a further zero byte.

8. The method of claim 5, if the predetermined criterion is not met, further
15 comprising the steps of:

skipping (50) one byte after the zero byte, and

examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the skipped byte to identify a further zero byte.

9. The method of claim 5, wherein the video data signal (25) is in a joint
20 photographic experts group (JPEG) format and the padding byte is not zero.

10. The method of claim 9, after the step of examining (32) the video data signal (25) in the byte-by-byte manner to identify the zero byte, further comprising the steps of:

identifying (34) a value of a byte before the zero byte, said byte before the zero byte is identified as a byte A, and

determining (35) if the byte before the zero byte is zero.

11. The method of claim 10, if the byte before the zero byte is zero, further
5 comprising the steps of:

skipping (50) one byte after the zero byte, and

examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the skipped byte to identify a further zero byte.

12. The method of claim 10, if the byte before the zero byte is not zero, further
10 comprising the step of:

identifying (36) a value of a byte before the byte before the zero byte, said byte before the byte before the zero byte is identified as a byte B.

13. The method of claim 12, further comprising the steps of:

determining (38) a value of a combinational byte equals to a logical OR
15 combination of the bytes A and B, said combinational byte is identified as a byte C = A OR B,

determining (40) a value of a first 16-bit or 32-bit binary number, identified as a binary number D, wherein a least significant byte of the binary number D equals to the byte C, and a next byte to the least significant byte of the binary number D equals
20 to the byte A,

determining (42) a value of a second 16-bit or 32-bit binary number, identified as a binary number E equals to D+1, and

determining (44) a value of a third 16-bit or 32-bit binary number, identified as a binary number F, equals to a logical AND combination of the binary numbers E and D: $F = E \text{ AND } D$.

14. The method of claim 13, if the value of the binary number F is zero, further
5 comprising the step of:

removing the padding byte next to the zero byte.

15. The method of claim 14, further comprising the steps of:

skipping (50) one byte after the removed padding byte, and

10 examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the skipped byte to identify a further zero byte.

16. The method of claim 13, if the value of the third binary number F is not zero, further comprising the steps of:

skipping (50) one byte after the zero byte, and

15 examining (32) the video data signal (25) in the byte-by-byte manner starting with a byte next to the skipped byte to identify a further zero byte.

17. An electronic device (10), comprising:

a camera (12) for generating an encoded video data signal (22), said encoded video data signal (22) includes padding binary numbers and a synchronization code;

20 means for removing the synchronization code (24) from the encoded video data signal (22), for providing a video data signal (25) encoded with the padding binary numbers only; and

a false sync code protection (FSP) decoding means (16), responsive to the video data signal (25), for examining (32) the video data signal (25) in a byte-by-byte

manner for identifying a predetermined binary number and for determining (46) if the padding binary number follows the predetermined binary number based on a predetermined criterion.

18. The electronic device (10) of claim 17, wherein said FSP decoding means (16)
5 removes the padding binary number next to the predetermined binary number if the predetermined criterion is met.

19. The electronic device (10) of claim 17, wherein said FSP decoding means (16) provides a decoded video signal (26a, 26b) free of the padding binary numbers.

20. The electronic device (10) of claim 17, wherein the means for removing the
10 synchronization code (24) is a compact camera port (CCP) block (24).

21. The electronic device (10) of claim 17, wherein said electronic device is a camera-phone and wherein the FSP decoding means (16) is a part of a phone engine (14) of the camera-phone (10).

22. The electronic device (10) of claim 17, wherein the padding binary number is
15 an 8-bit binary number, which is equivalent to one byte.

23. The electronic device (10) of claim 17, wherein the padding binary number is a 8-bit binary number, which is equivalent to one byte, and the predetermined binary number is a zero byte.

24. The electronic device (10) of claim 23, wherein said FSP decoding means (16)
20 removes the padding byte next to the zero byte if the predetermined criterion is met.